

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	:	DAVIES et al.
Serial No.:	:	09/876,515
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Filed	:	06/07/2001
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Art Unit	:	2614
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Examiner	:	Karen L. Le
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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

Sir:

Enclosed is an Appeal Brief in the above-identified patent application. Please charge the fee of \$500.00 to Deposit Account No. 14-1270.

Respectfully submitted,

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**I. REAL PARTY IN INTEREST**

The real party in interest is Koninklijke Philips Electronics N.V. corporation, the assignee of record.

**II. RELATED APPEALS AND INTERFERENCES**

Appellant is not aware of any pending appeals, judicial proceedings, or interferences which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

**III. STATUS OF CLAIMS**

Claims 1-14 are rejected.

**IV. STATUS OF AMENDMENTS**

All amendments prior to the Final Office Action were entered into the record.

**V. SUMMARY OF CLAIMED SUBJECT MATTER**

The present invention, as recited in independent claim 1, is related to a communications system comprising at least one beacon device (12, 14) capable of wireless message transmission and at least one portable device (10) capable of receiving such a message transmission. See page 6, lines 30-31; Fig. 1. The beacon is arranged to broadcast a series of inquiry messages, each in the form of a plurality of predetermined data fields arranged according to a first communications protocol. See page 8, lines 14-20; page 10, lines 5-20; page 10, line 31 through page 12, line 14; Fig. 1. The beacon is further arranged to add to each inquiry message, prior to transmission, an

additional data field. See page 12, lines 19-26; Fig. 5. The portable device is arranged to receive the transmitted inquiry messages and read data from the additional data field, the additional data field including location information. See page 16, line 1 through page 17, line 22.

The present invention, as recited in independent claim 10, is related to a beacon device capable of wireless message transmission and for use in a communications system comprising the beacon device and at least one portable device capable of receiving such a message transmission. See page 6, lines 30-31; Fig. 1. The beacon is configured to broadcast a series of inquiry messages, each in the form of a plurality of predetermined data fields arranged according to a first communications protocol. See page 8, lines 14-20; page 10, lines 5-20; page 10, line 31 through page 12, line 14; Fig. 1. The beacon is also configured to add to each inquiry message prior to transmission an additional data field. See page 12, lines 19-26; Fig. 5. The at least one portable device, arranged to receive the transmitted inquiry messages, is enabled to read data from the additional data field, the additional data field including location information. See page 16, line 1 through page 17, line 22.

The present invention, as recited in independent claim 11, is related to a method for enabling the user of a portable communications device to receive broadcast messages. See page 6, lines 30-31; Fig. 1. At least one beacon device broadcasts a series of inquiry messages, each in the form of a plurality of predetermined data fields arranged according to a first communications protocol. See page 8, lines 14-20; page 10, lines 5-20; page 10, line 31 through page 12, line 14; Fig. 1. The beacon adds to each inquiry message, prior to transmission, an additional data field carrying broadcast message data including location information. See page 12, lines 19-26; Fig. 5. The portable device receives the transmitted inquiry messages including

the location information and reads the broadcast data from said additional data field. See page 16, line 1 through page 17, line 22.

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether claims 1-14 are properly rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,835,861 (hereinafter “Whiteside”) in view of U.S. Patent 6,169,498 (hereinafter “King”).

## **VII. ARGUMENT**

1) Claims 1, 8, 10 and 11 are not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Whiteside in view of King.

To establish a *prima facie* case of obviousness, three basic criteria must be met.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). MPEP § 2143 - §2143.03 contain decisions pertinent to each of these criteria.

Applicant submits that the Examiner has not established a *prima facie* case of obviousness because the prior art references cited by the Examiner do not teach or suggest all the

claim limitations, as recited in independent claims 1, 10 and 11, or in any of their respective dependent claims.

Applicant respectfully submits that Whiteside does not teach or suggest a beacon “arranged to broadcast a series of inquiry messages” as recited in, e.g., claim 1. What Whiteside discloses is a method of transmitting advertising information from a billboard to a wireless telephone. Whiteside describes two embodiments. In a first embodiment, an “infrared transceiver simply broadcasts the telephone number of the vendor continuously.” See 2:13-16 of the patent. In a second embodiment, the method comprises: “receiving a signal transmitted from a wireless telephone at a billboard, said signal being other than the regular wireless frequency band and, in response to receiving said signal, automatically transmitting a second signal from said billboard that is to be received and stored by said wireless telephone.” See 3:22-32 and 2:26-30 of the patent. In other words, the billboard in Whiteside does not broadcast inquiry messages, but instead it either simply broadcasts advertising information continuously, or it sends back a signal that includes the advertising information in response to a signal received from a wireless telephone. There is no teaching or suggestion that the billboard in Whiteside would broadcast inquiry messages.

Furthermore, Applicant submits that Whiteside does not teach or suggest the inquiry messages being “in the form of a plurality of predetermined data fields arranged according to a first communications protocol,” or that “the beacon is further arranged to add to each inquiry message prior to transmission an additional data field,” as recited in claims 1, 10 and 11. What Whiteside discloses is just that the signal broadcast from the billboard to the wireless telephone “can also be used to convey other data, such as a bank interest rate, current product cost,” and that the message transmitted from the wireless telephone to the billboard “can also be enhanced

to make a more specific request for one of the items of information that can be supplied by the billboard.” See 2:35-39. In other words, Whiteside only describes the various types of information that can be exchanged between the wireless telephone and the billboard. Whiteside does not teach or suggest what kind of structures and/or protocols are used to transmit that information. In particular, Whiteside is silent about adding an additional data field prior to transmission, as recited in claims 1, 10 and 11.

The Examiner admits that “Whiteside does not teach the additional data field including location information,” and relies upon King for that feature. Applicant submits that King, not only fails to cure the deficiencies previously pointed out in Whiteside, but it also does not teach or suggest “the additional data field including location information” either. King is directed to a method for communicating location-specific messages. However, the method taught by King requires “storing a library of such messages within a portable device having a capability of randomly accessing the messages.” *See, e.g.,* Abstract, lines 1-4; and claims 1, 8 and 9 of King. In other words, the location-specific messages disclosed by King are already stored in the portable device: they are not sent from a beacon to the portable device, as recited in Applicant’s claims 1, 10 and 11.

Applicant, therefore, submits that the Examiner has failed to establish a *prima facie* case of obviousness because the prior art references cited by the Examiner do not teach or suggest all the claim limitations, as recited in independent claims 1, 10 and 11. Applicant also submits that claim 8, which depends from 1, is patentable over the cited art references for at least the reasons stated above in connection with claim 1. Accordingly, reconsideration and withdrawal of the rejection of claims 1, 8, 10 and 11 is respectfully requested.

2) Claims 2, 3, 12 and 13 are not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Whiteside in view of King.

Claims 2-3 and 12-13 depend, respectively, from claims 1 and 11 and are, therefore, also patentable over the cited art references for at least the reasons stated above in connection with claims 1 and 11, as well as for the separately patentable subject matter recited therein. In particular, and contrary to the Examiner's assertion, Applicant submits that Whiteside does not teach or suggest "the beacon is arranged to add said additional data field at the end of a respective inquiry message," as recited in claims 2 and 12. Furthermore, there is absolutely no teaching or suggestion in Whiteside of a beacon "arranged to include an indication in one of said predetermined data fields, said indication denoting the presence of said additional data field," as recited in claims 3 and 13. Moreover, Applicant respectfully submits that the citation provided by the Examiner in support for the rejection is completely irrelevant. At column 2, lines 35-39, Whiteside only states that, "Message 16 can also be used to convey other data, such as a bank interest rate, current product cost; message 15 can also be enhanced to make a more specific request for one of the items of information that can be supplied by the billboard."

Applicant therefore submits that the Examiner has failed to establish a *prima facie* case of obviousness against the subject matter recited in claims 2-3 and 12-13 because the prior art references cited by the Examiner do not teach or suggest all the claim limitations. Accordingly, reconsideration and withdrawal of the rejection of claims 2-3 and 12-13 is respectfully requested.

3) Claims 4 and 14 are not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Whiteside in view of King.

Claims 4 and 14 depend, respectively, from claims 1 and 11, and are therefore also patentable over the cited art references for at least the reasons stated above in connection with claims 1 and 11, as well as for the separately patentable subject matter recited therein. In particular, and contrary to the Examiner's assertion, Applicant submits that Whiteside does not teach or suggest "wherein said communications protocol comprises Bluetooth messaging," as recited in claims 4 and 14. What Whiteside teaches at column 1, lines 48-49 is that "Communications in both directions are via a modulated infrared signal," which teaches away from a Bluetooth protocol. Bluetooth is an industrial specification for wireless networks, also known as IEEE 802.15.1, that provides a way to connect and exchange information between devices via a short range radio frequency, whereas Whiteside teaches communications via an infrared signal.

Applicant, therefore, submits that the Examiner has failed to establish a *prima facie* case of obviousness against the subject matter recited in claims 4 and 14, because the prior art references cited by the Examiner do not teach or suggest all the claim limitations. Accordingly, reconsideration and withdrawal of the rejection of claims 4 and 14 is respectfully requested.

4) Claims 5 and 7 are not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Whiteside in view of King.

Claims 5 and 7 depend, respectively, from claims 4 and 1 and are, therefore, also patentable over the cited art references for at least the reasons stated above in connection with claims 4 and 1, as well as for the separately patentable subject matter recited therein. In particular, and contrary to the Examiner's assertion, Applicant submits that Whiteside does not teach or suggest "a special Dedicated Inquiry Access Code (DIAC) is used to indicate the



presence of location information in the additional data field,” as recited in Applicant’s claim 5. Furthermore, there is absolutely no teaching or suggestion in Whiteside that the “wireless messaging system employs frequency hopping, and further wherein location data is sent on each frequency used for inquiry message broadcasts,” as recited in Applicant’s claim 7. Moreover, Applicant respectfully submits that the citation provided by the Examiner in support for this rejection is again completely irrelevant. At column 1, lines 48-49, Whiteside only states that, “Communications in both directions are via a modulated infrared signal.”

Applicant, therefore, submits that the Examiner has failed to establish a *prima facie* case of obviousness against the subject matter recited in claims 5 and 7, because the prior art references cited by the Examiner do not teach or suggest all the claim limitations. Accordingly, reconsideration and withdrawal of the rejection of claims 5 and 7 is respectfully requested.

5) Claim 6 is not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Whiteside in view of King.

Claim 6 depends from claim 1 and is therefore also patentable over the cited art references for at least the reasons stated above in connection with claim 1, as well as for the separately patentable subject matter recited therein. In particular, and contrary to the Examiner’s assertion, Applicant submits that King does not teach or suggest “wherein the presence of location information in the additional data field is indicated with header information appearing in the additional data field,” as recited in Applicant’s claim 6. The Examiner already admitted that Whiteside does not teach this feature, and Applicant submits that there is absolutely no teaching or suggestion of this feature in King either. Once again, the citation provided by the Examiner in support for this rejection is completely irrelevant. What King discloses in the Abstract, lines 17-

22 is just that, “The fixed map information and the time-dependent information may then be accessed to locate a particular site specified by the time-dependent information. For example, the map information may include gate locations within an airport and the time-dependent information may include flight arrival and departure times.”

Applicant, therefore, submits that the Examiner has failed to establish a *prima facie* case of obviousness against the subject matter recited in Applicant’s claim 6, because the prior art references cited by the Examiner do not teach or suggest all the claim limitations. Accordingly, reconsideration and withdrawal of the rejection of claim 6 is respectfully requested.

6) Claim 9 is not properly rejected under 35 U.S.C. §103(a) as being unpatentable over Whiteside in view of King.

Claim 9 depends from claims 1 and 8 and is, therefore, also patentable over the cited art references for at least the reasons stated above in connection with claims 1 and 8, as well as for the separately patentable subject matter recited therein. In particular, and contrary to the Examiner’s assertion, Applicant submits that Whiteside does not teach or suggest “wherein the receiver is configured to receive messages according to Bluetooth protocols,” as recited in claim 9. What Whiteside teaches at column 1, lines 48-49 is that “Communications in both directions are via a modulated infrared signal,” which teaches away from a Bluetooth protocol. Bluetooth is an industrial specification for wireless networks, also known as IEEE 802.15.1, that provides a way to connect and exchange information between devices via a short range radio frequency, whereas Whiteside teaches communications via an infrared signal.

Applicant therefore submits that the Examiner has failed to establish a *prima facie* case of obviousness against the subject matter recited in Applicant’s claim 9, because the prior art

references cited by the Examiner do not teach or suggest all the claim limitations. Accordingly, reconsideration and withdrawal of the rejection of claim 9 is respectfully requested.

### **VIII. CONCLUSION**

In light of the above, Applicant respectfully submits that the rejections of claims 1-14 are in error. The prior art references relied upon in the Final Office Action do not anticipate or render obvious Applicant 's claims. Thus, Applicant respectfully submits that the rejections are in error, legally and factually, and must be reversed.

Respectfully submitted,

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914-333-9602

**IX. CLAIMS APPENDIX**

1. A communications system comprising at least one beacon device capable of wireless message transmission and at least one portable device capable of receiving such a message transmission, wherein the beacon is arranged to broadcast a series of inquiry messages each in the form of a plurality of predetermined data fields arranged according to a first communications protocol, wherein the beacon is further arranged to add to each inquiry message prior to transmission an additional data field, and wherein the at least one portable device is arranged to receive the transmitted inquiry messages and read data from said additional data field, the additional data field including location information.
2. A system as claimed in claim 1, wherein the beacon is arranged to add said additional data field at the end of a respective inquiry message.
3. A system as claimed in claim 1, wherein the beacon is arranged to include an indication in one of said predetermined data fields, said indication denoting the presence of said additional data field.
4. A system as claimed in claim 1, wherein said first communications protocol comprises Bluetooth messaging.
5. A system as claimed in claim 4, wherein a special Dedicated Inquiry Access Code (DIAC) is used to indicate the presence of location information in the additional data field.

6. A system as claimed in claim 1, wherein the presence of location information in the additional data field is indicated with header information appearing in the additional data field.
7. A system in accordance with claim 1, wherein wireless messaging system employs frequency hopping, and further wherein location data is sent on each frequency used for inquiry message broadcasts.
8. A mobile communication device for use in the system of claim 1, the device comprising a receiver capable of receiving a short-range wireless inquiry message including a plurality of data fields according to a first communications protocol, means for determining when an additional data field including location information has been added to said plurality of data fields, and means for reading the location information data from such an additional data field.
9. A device as claimed in claim 8, wherein the receiver is configured to receive messages according to Bluetooth protocols.
10. A beacon device capable of wireless message transmission and for use in a communications system comprising said beacon device and at least one portable device capable of receiving such a message transmission, wherein the beacon is configured to broadcast a series of inquiry messages each in the form of a plurality of predetermined data fields arranged according to a first communications protocol, and to add to each inquiry message prior to transmission an additional data field, such as to enable the at least one portable device arranged to receive the transmitted

inquiry messages to read data from said additional data field, the additional data field including location information.

11. A method for enabling the user of a portable communications device to receive broadcast messages wherein at least one beacon device broadcasts a series of inquiry messages each in the form of a plurality of predetermined data fields arranged according to a first communications protocol, wherein the beacon adds to each inquiry message prior to transmission an additional data field carrying broadcast message data including location information, and wherein the portable device receives the transmitted inquiry messages including the location information and reads the broadcast data from said additional data field.

12. A method as claimed in claim 11, wherein the beacon adds said additional data field at the end of a respective inquiry message.

13. A method as claimed in claim 11, wherein the beacon includes an indication in one of said predetermined data fields, said indication denoting the presence of said additional data field.

14. A method as claimed in claim 11, wherein said first communications protocol comprises Bluetooth messaging.

**X. EVIDENCE APPENDIX**

None.

**XI. RELATED PROCEEDINGS APPENDIX**

None.